KATINGAN PEATLAND RESTORATION AND CONSERVATION PROJECT

MONITORING & IMPLEMENTATION REPORT - SUMMARY

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PT Rimba Makmur Utama

PERMIAN GLOBAL

Wetlands INTERNATIONAL

Puter INDONESIA

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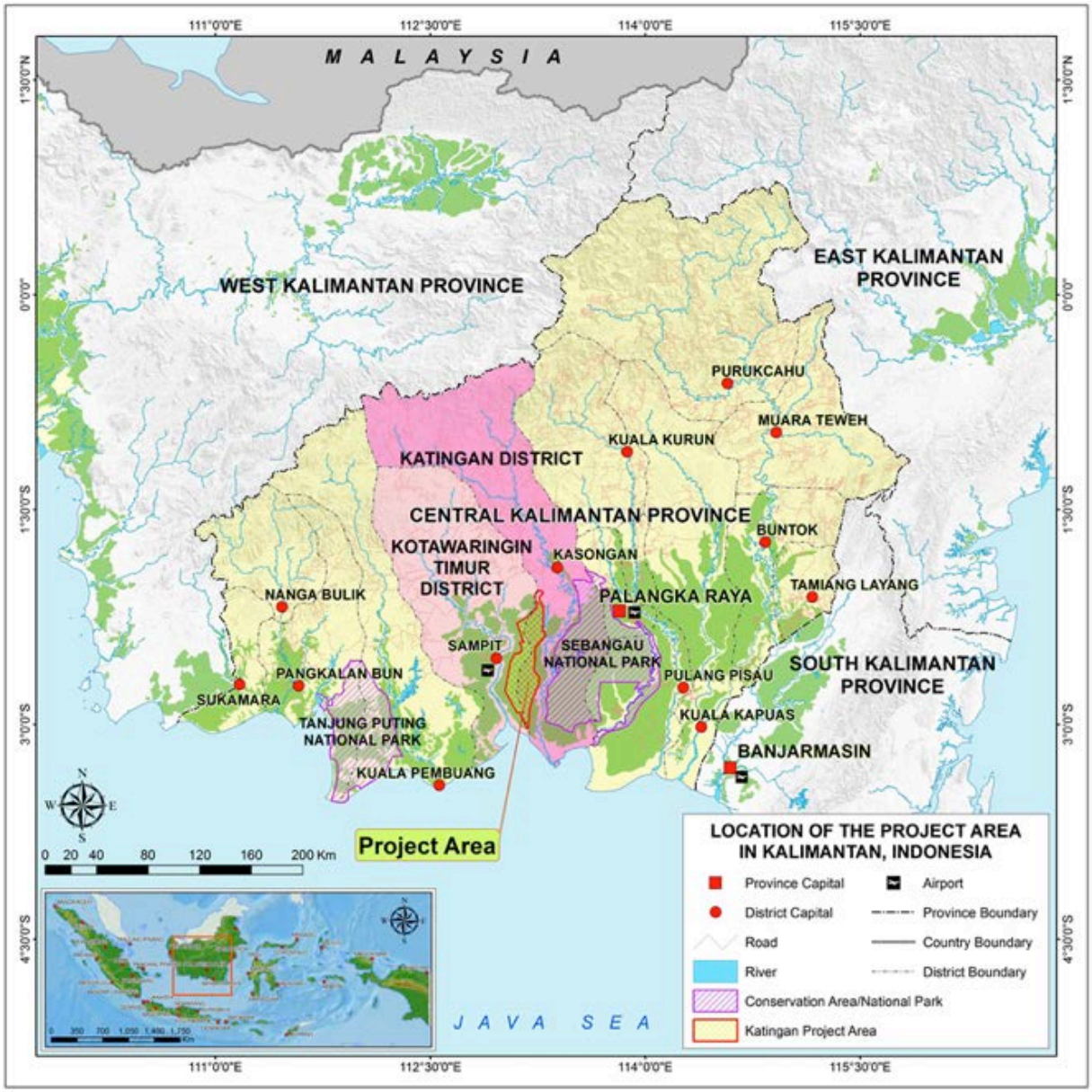
1 SUMMARY DESCRIPTION OF THE PROJECT

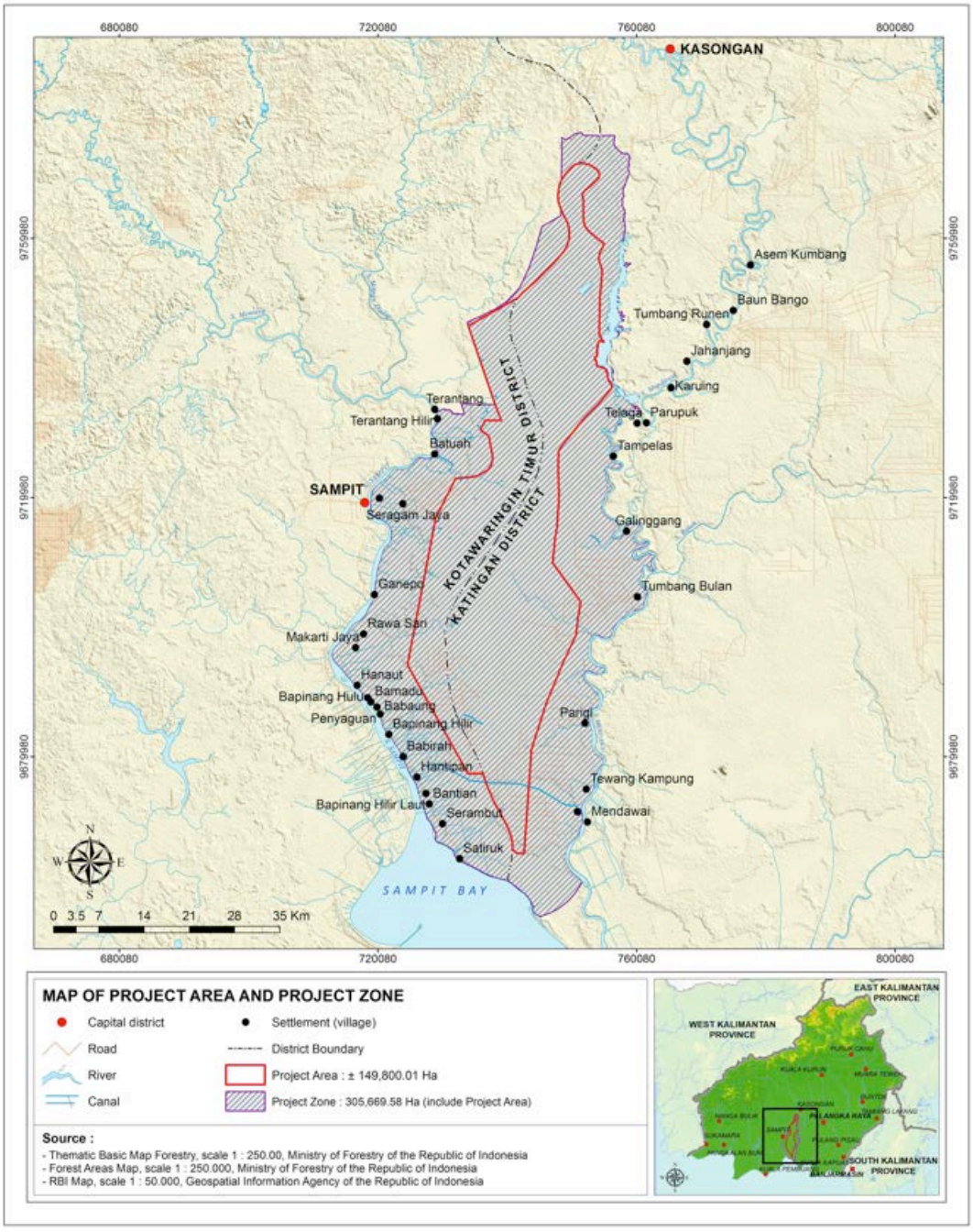
The Katingan Restoration and Conservation Project ('The Katingan Project') is managed by an Indonesian company, PT. Rimba Makmur Utama. It protects and restores 149,800 hectare of peatland forest ecosystem, to offer local people sustainable sources of income, and to tackle global climate change. The project lies within the districts of Katingan and Kotawaringin Timur in Central Kalimantan Province, and covers one of the largest remaining intact peat swamp forests in Indonesia (Figure 1).

Figure 1: *Location of the Katingan Project in Kalimantan, Indonesia*



The project area of 149,800 ha is defined by the ecosystem restoration concession (ERC) license and is the area over which GHG emission reductions are achieved and quantified. The wider project zone, covering an area of 305,669 ha, represents the extent of the area in which the wider range of project activities are implemented. This area includes the main river catchments and the land of 34 villages likely to be affected by the project (Figure 2).

Figure 2: *The location of the project area and project zone*



The project area is almost entirely based on peat soils and stores vast amounts of carbon. It plays a vital role in stabilizing water flows, preventing devastating peat fires, enriching soil nutrients and providing clean water. It is rich in biodiversity, being home to large populations of many high conservation value species, including some of the world's most endangered species such as the Bornean Orangutan (*Pongo pygmaeus*) and Proboscis Monkey (*Nasalis larvatus*). Surrounded by villages, the area supports traditional livelihoods including farming, fishing, and non-timber forest products harvesting.

The goal of the Katingan Project is to develop and implement a sustainable land use model through reducing deforestation and degradation, habitat and ecosystem restoration, biodiversity conservation, and growing economic opportunities for the local people of Central Kalimantan. The Katingan Project is designed to ensure that all benefits are real, long lasting, and passed on to local communities, the region, and to the wider State of Indonesia in which it operates.

2 PROJECT OBJECTIVES

The goal of the Katingan Project is to develop and implement a sustainable land use model through reducing deforestation and degradation, habitat and ecosystem restoration, biodiversity conservation, and increasing economic opportunities for the local people of Central Kalimantan. The Katingan Project is designed to achieve this through a series of objectives, considered in turn below:

A) Climate objectives

- To deliver credible GHG emissions reductions through avoided deforestation and forest degradation, prevention of peat drainage and fires
- To enhance ecological values at the landscape scale through ecosystem restoration
- To conduct research and development (R&D) activities as to implement the latest science, research and management practices

B) Community objectives

- To enhance the quality of life and reduce poverty of the project-zone communities by creating sustainable livelihood options and economic opportunities
- To strengthen community resilience by increasing capacity to cope with socio-ecological risks
- To maintain and enhance ecosystem services for the overall well-being of the project-zone communities through ecosystem restoration

C) Biodiversity objectives

- To eliminate drivers of deforestation and forest degradation and to stabilize and maintain healthy populations of faunal and floral species in the project zone through biodiversity conservation and protection
- To maintain natural habitats and ecological integrity through ecosystem restoration

3 PROJECT PROPONENT

The Katingan Project is developed and managed by the ecosystem restoration concession (ERC) holder, PT. Rimba Makmur Utama (RMU). By collaborating with the project-zone communities and partner organizations, PT. RMU takes full responsibility to manage, finance and implement project activities for the duration of the project.Table 1 below shows the project proponent's information.

Table 1: *Project proponent information*

Organization	PT. Rimba Makmur Utama (PT. RMU)
Category	Private company
Contact person	Dharsono Hartono, Director
Address	Menara BCA, Fl. 45, Jl. MH Thamrin No. 1, Jakarta, Indonesia Phone: +62 (0)21 2358 4777; Fax +62 (0)21 2358 4778; Mobile: +62 (0)816-976-294 dharsono@ptrmu.com
Profile	PT. RMU was founded in 2007 with a mission to restore and conserve peatland in Central Kalimantan Province through a land-use permit, IUPHHK-RE, also known as ecosystem restoration concession (ERC). By using the ERC business model, PT. RMU seeks to reduce greenhouse gas emissions within the concession site and generate carbon offset credits under REDD+ mechanisms.

4 PROJECT START DATE AND MONITORING PERIOD

The project start date is November 1, 2010. The duration of the VCS project crediting period is 60 years, beginning on the project start date of November 1, 2010 and ending on October 31, 2070. This period is consistent with the terms of the ecosystem restoration concession licences held by PT RMU. The current monitoring period, reported here, covers the two year period since the last CCB monitoring report: 1st November 2015 through 31st December 2017 for CCB, and the one year period since the last VCS monitoring report: 1st January 2017 through 31st December 2017 for VCS.

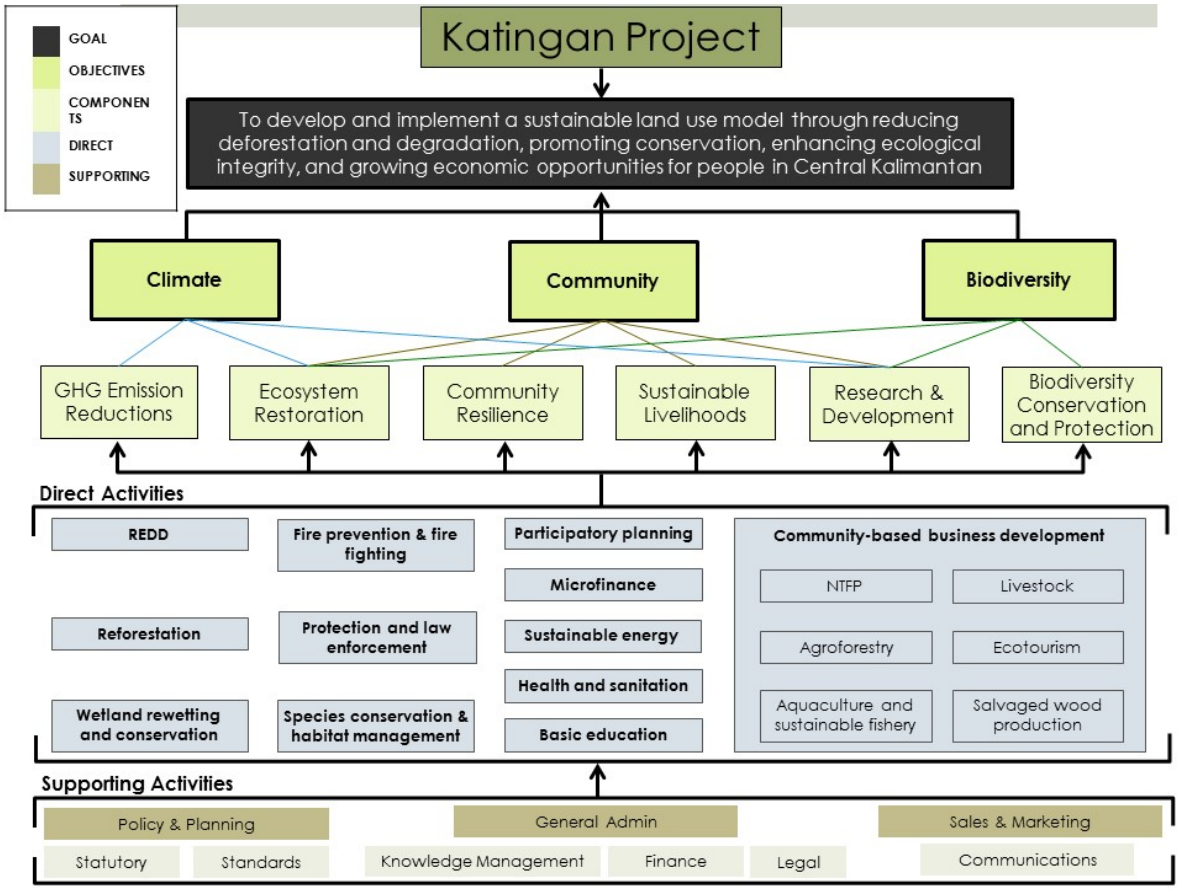
5 SECTORAL SCOPE AND PROJECT TYPE

The Katingan Project is categorized as an Agriculture, Forestry and Other Land Use (AFOLU) project under the Reduced Emissions from Deforestation and Degradation (REDD) project category. The project activities are categorized under the VCS as a combination of REDD+WRC and ARR+WRC; specifically as Avoiding Planned Deforestation (APD) and Reforestation (ARR), in combination with Conservation of Undrained and Partially drained Peatland (CUPP) and Rewetting of Drained Peatland (RDP) activities. This is not a grouped project.

6 SUMMARY OF PROJECT ACTIVITY

The project has successfully implemented a wide variety of project activities supporting its objectives for climate, community and biodiversity. In turn, these activities have successfully conserved a vast ecosystem of peat swamp forest which would have otherwise been converted to industrial acacia plantations. Activities have been implemented in line with the project framework presented below (in Figure 3). Key activities and outcomes from this monitoring period are summarised below.

Figure 3: *Katingan Project Framework*



- **Avoided Deforestation and peat drainage (REDD + WRC):** The project has avoided the deforestation, degradation and drainage of a vast area of peat swamp forest. No fires were recorded within the project area during this monitoring period. During the monitoring period 251 community members were involved in project activities including re-wetting and biodiversity monitoring.
- **Reforestation (ARR):** During the monitoring period, 127 men and women from six villages were involved in reforestation activities, including providing seedlings, biodegradable bags, maintaining nurseries, planting the seedlings in firebreak areas, watering the seedlings and weed control.
- **Fire prevention and suppression:** 536 local villagers helped establish fire prevention and fighting teams, in addition to full-time dedicated project staff. These teams worked to identify and minimize surface fuel in high-risk areas, build water ponds and a deep well for firefighting, conduct patrols and conduct fire prevention and suppression activities. Early warning systems were also developed and are currently in use. Fire prevention awareness events were attended by over 2,400 people.
- **Participatory Planning:** 31 villages have now completed the participatory mapping process while 22 villages have completed the subsequent planning process as evidenced by completed MOUs or formal agreements. Village Forest (Hutan Desa) applications have been submitted by two villages with more being planned. During this period the project also provided support for village events or infrastructure on 36 occassions.
- **Community-based business development:** Community livelihood development is a core priority of the Katingan Project. During this monitoring period, the project provided assistance to 1,102 community members involved in sustainable business development, including rattan, livestock, aquaculture, rice growing, chicken farming, coconut sugar and ecotourism. A further 1,013 community members were assisted in agroforestry or agroecology development,
- **Microfinance development:** The Katingan Project seeks to assist sustainable local development by supporting the development of small to medium sized businesses In this monitoring period, two new microfinance institutions were established, with 66 new members; bringing the total number of recipients up to 948 since the project's start. Training events were provided to 133 recipients,
- **Sustainable energy development:** The project provided assistance to 63 people in the development of sustainable bio-gas energy, linked to livestock farming.
- **Improved public health, sanitation and education:** During the monitoring period, 24 new households were allocated supplemental grants from the project to build latrines to prevent the discharge of waste into the local rivers, 227 community members benefitted from improved access to local health care, and 100 community members, including children, benefitted from improved education initiatives or support for access to higher education.

7 EMPLOYMENT AND TRAINING

The Katingan Project and PT. RMU operate in full compliance with Indonesia's labour law and aim to set an example of best practice. To date over 88% of project field staff have been hired from project zone communities, representing 76% of the total project personnel, while all other staff are from Indonesia. Some form of training or capaicty building has been delivered to over 700 recipients.

8 STAKEHOLDER ENGAGEMENT

During the monitoring period the project has continued to conduct numerous stakeholder consultations at the national, provincial, district, sub-district and village level. During the monitoring period over 350 such events were held, reaching over 5,500 participants. Through this process, information has been disseminated on the ecosystem restoration concession concept, planned and implemented activities, management plans and project boundary setting processes, and has adapted feedback from the stakeholders into agreed plans and legal approvals.

9 LEGAL STATUS

The Katingan Project is implemented in full compliance with national and regional laws of the Republic of Indonesia, including those relating carbon emissions offsets and the National REDD+ strategy. It operates under legal approval from the formal licences SK.734/Menhut-II/2013 (covering 108,225 ha) and BKPM SK.23/1/IUPHHK-RE/PMDN/2016 covering the remaining 49.500 ha.

10 METHODOLOGY

The Katingan Project applies the latest version of approved VCS methodology VM0007 (version 1.5), including all applicable modules. All applicability conditions of the methodology and its associated modules have been met.

11 BASELINE SCENARIO, ADDITIONALITY & EMISSIONS

The project area is located entirely within state-designated production forest. Without the project, under the business-as-usual scenario, the area would be converted into fast-growing industrial pulpwood (acacia) plantations. The Katingan Project prevents this primarily by obtaining legal control of the production forest area. Total baseline emissions during the VCS monitoring period (01-Jan-2017 – 31-Dec-17) were estimated to be 5,836,278 tCO_2e .

12 PROJECT GHG EMISSION REDUCTIONS AND REMOVALS

Project emissions that were accounted for during the VCS reporting period (01-Jan-2017 – 31-Dec-17), and the GHG emissions estimated, are shown in Table 2 below. Emissions that were not accounted for during this reporting period, but which will be accounted for in future periods, include those resulting from biomass stock changes due to ARR activities and forest growth.

Table 2: *Summary of project emissions (01-Jan-2017 – 31-Dec-17)*

Source of emissions	**tCO_2e**
Emissions from forest degradation	117,783
Emissions from uncontrolled biomass burning	0
Emissions from microbial decomposition of peat	159,635
Emissions from water bodies in peatlands (DOC)	456
Emissions from uncontrolled burning	191,375
Leakage	0

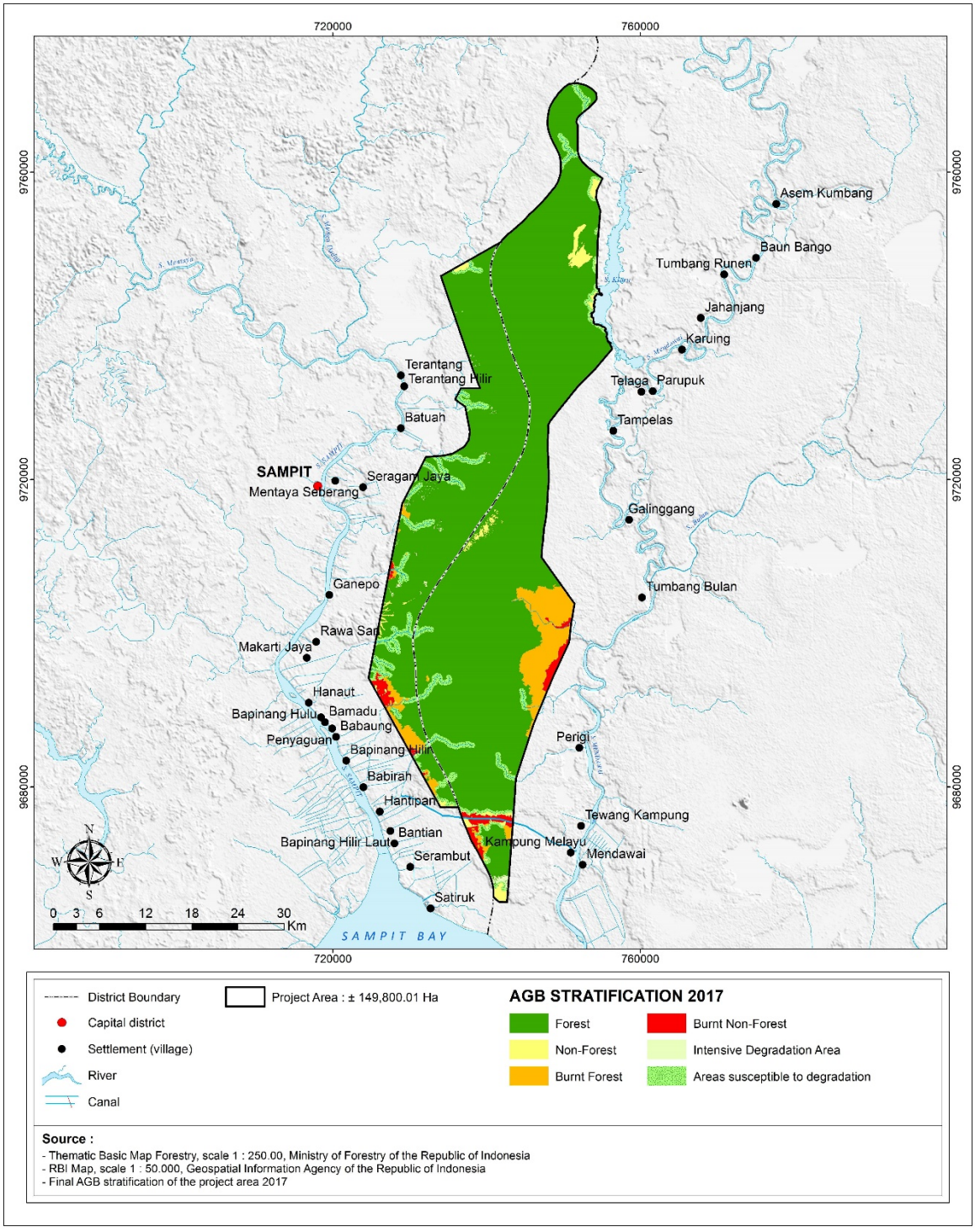
13 STRATIFICATION CHANGES

Due to the uncontrolled burning and illegal logging activities witnessed during the monitoring period, the project description stratification was updated to include the strata shown in Table 3 below.

Table 3*: 2017 Stratification classes and areas*

2015 Stratification classes	**Area (ha)**
Forest	126,373
Non-forest	2,575
Area Susceptible to Degradation	9,384
Intensive Degradation	407
Burnt Forest	8,599
Burnt Non-forest	2,462
Total	149,800

Figure 4: *Updated stratification at end of monitoring period (Dec 2017)*



14 UNCERTAINTY AND NON-PERMANENCE RISK

The total error in the REDD+ project was calculated to be 0.90%. Considering the 15% uncertainty threshold, no VCU deductions were made due to uncertainty. The combined non-permanence risk buffer for the project was determined as 10%

15 CALCULATION OF VERIFIED CARBON UNITS

VCU are calculated by subtracting the VCS non-permanence risk buffer withholding from the uncertainty adjusted net emission reductions for each project activity. In total the project generated and estimated **4,830,326** VCUs during the VCS reporting period (01-Jan-2017 – 31-Dec-17).

16 COMMUNITY & BIODIVERSITY

The project has had a net positive impact on all groups in the communities in the project zone, and no high conservation values related to community well-being have been negatively affected. The project has also had a significant net positive biodiversity benefit in relation to the baseline. Project community and biodiversity benefits both meach the Gold Standard level:

- **Community Gold Standard**: The project zone is qualified as a rural area of a high concentration of population living under the national poverty line, and the Katingan Project delivers significant well-being benefits to smallholders/community members. The project has benefited communities through a variety of socio-economic activities which also target the most vulnerable and marginalized community members. This includes the poor, women, youth and the elderly. These programs are designed to lift the poorest out of poverty by engaging them in community-based business development such as microfinance, women's empowerment, sustainable agroforestry, renewable energy development, and NTFPs. All community programs are designed and implemented through community participation, transparent decision-making processes based on mutual trust, and proper management of project activities.

- **Biodiversity Gold Standard**: The Katingan Project is qualified as a Key Biodiversity Area (KBA), and conserves and protects the biodiversity of global significance. The project has generated exceptional biodiversity benefits based on multiple achievement of the criteria. This includes five species considered critically endangered, 11 considered endangered, and 36 species considered vulnerable. For two of these at least, Orangutan and Proboscis Monkey, the project zone is estimated to hold over 5% of the entire global population.